

METHOD OF FABRICATING AN MRAM DEVICE INCLUDING SPIN DEPENDENT TUNNELING JUNCTION MEMORY CELLS

ABSTRACT OF THE DISCLOSURE

A spin dependent tunneling (“SDT”) junction of a memory cell for a Magnetic Random Access Memory (“MRAM”) device includes a pinned ferromagnetic layer, followed by an insulating tunnel barrier and a sense ferromagnetic layer. During fabrication of the MRAM device, after formation of the pinned layer but before formation of the insulating tunnel barrier, an exposed surface of the pinned layer is flattened. The exposed surface of the pinned layer may be flattened by an ion etching process.